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The Burden of Asthma in New England
*Results from the National Survey of Children's Health, 2003
and the 2004 Behavioral Risk Factor Surveillance System*
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A SUMMARY REPORT FOR NEW ENGLAND COMMUNITIES

Asthma is a lung disease that, if not treated, can cause permanent lung damage, disability and sometimes even death. An asthma attack is what happens when the airways narrow, in response to a "trigger", making it difficult to breathe. Attacks usually occur in reaction to allergens, certain air pollutants or weather conditions, respiratory illnesses such as a cold or flu, or even stress.

This report highlights how asthma affects adults, children, and families living in New England. It is a summary of the most comprehensive analysis of asthma ever conducted in the region. The detailed report, with statistics and graphs, can be obtained from the Asthma Regional Council or downloaded from its website (www.asthmaregionalcouncil.org).

FINDINGS

Who Has Asthma in New England:

- New Englanders have significantly higher rates than the rest of the country. Nearly 15% of adults and 14% of children living in New England have had asthma. This represents about 2.1 million people who have had asthma in our relatively small region, up from 1.7 million just three years prior when ARC released its last report.
- Adult and childhood asthma rates in New England are among the highest of any of the other ten U.S. Department of Health and Human Service regions.
- Asthma is a growing problem in New England. While the disease may be leveling off in other parts of the country, it appears to be getting worse in our region--at least among adults.
- Asthma affects everyone: young and old, rich and poor, men and women, and people from every ethnic or racial background. However certain groups are more likely to get it:
 - Teenagers and young adults are most likely to have experienced asthma (17% and 21% respectively).
 - Asthma in adult women is much higher than in men, and is growing significantly.
 - The disease is more common in boys than in girls under 18 years of age.
 - Low income adults and children are much more likely to have asthma. Children in the lowest income bracket have double the rates of asthma compared with those in the highest income bracket.
 - Hispanic children have a significantly higher rate, and Black children have a somewhat higher rate, of asthma compared with non-Hispanic white children.
 - Adults who smoke and children living in a house with a smoker are at greater risk. *In fact, our analysis shows that children living with a smoker have a 44% greater chance of getting asthma.*
 - Obese children and adults are shown to have higher rates of the disease.

How Asthma Affects New England Children:

- Compared with non-asthmatic children, children with asthma were more likely to be frequently depressed and miss school in the past year.
- Over one third of children with asthma reported having “moderate to severe difficulties” due to their disease, and 15% had at least one activity limitation that prevented them from doing things other children their age can do.
- Nearly 60% of New England children with asthma had an asthma attack in the past 12 months.
- About 1/3 of all children with asthma surveyed had to visit a hospital Emergency Room in the previous year, and 5% required hospitalization. Low income children, as well as Black and Hispanic children, were hospitalized much more often than other children. For example, among the poorest children, 42% used the emergency room and 14% were hospitalized in the previous year.

How Asthma Affects New England Adults:

- Asthma presents a significant burden on adults with the disease. Over 30% of adults with asthma reported an activity limitation, 22% were in fair or poor overall health, and 17% reported frequent mental distress. Adults with asthma were consistently about twice as likely as those without asthma to report each of these measures of burden. Lower income and minority groups with asthma experienced these problems much more frequently.
- Adults with asthma found it more difficult to see a doctor when they needed to than those without asthma, even though they had similar insurance coverage rates.
- Asthma is significantly correlated with employment status. About 9% of adults with asthma reported being unable to work. About 21% of adults that are unable to work have asthma.
- Over 15% of adult caretakers of a child with asthma report that the disease causes a significant strain on their family.

CONCLUSIONS- Detailed Conclusions are in the full report.

1. **Asthma rates in New England continue to be significantly higher than the rest of the country, and the numbers of people affected continue to be increasing-contrary to national trends that show a leveling-off of the disease.**
2. **More needs to be done to ensure the proper care and control of asthma in New England. Despite our wealth of health care resources, too many people with asthma are unnecessarily restricted in their life activities, unable to work or attend school, and too many children are requiring emergency care.**
3. **Better attention must be given to supporting the psycho-social aspects of the disease.**
4. **Low income adults and children, as well as Hispanic and Black children, are at high risk for asthma and its consequences. A more targeted approach to asthma care is needed.**
5. **Environmental tobacco smoke may play an important role in the development of asthma in children.**
6. **Many New Englanders believe environmental conditions are affecting their health. More research and attention should be given to the environmental aspects of chronic diseases.**

Based on the number of children with asthma who experienced attacks and relied on urgent care, as well as the high percentage of adults with asthma who reported being disabled or unemployed, a major conclusion of this report is that asthma is not a well-managed disease in New England. This observation may indicate that providers are not well versed in national guidelines and best practices for controlling asthma, and that they may need more resources in order to devote proper attention to adequately educating patients and their families. It may also indicate that asthma care, home-based environmental improvements, and medications are unaffordable for many people.

Well-managed asthma patients, who are provided quality care consistent with national guidelines, would not be expected to require crisis interventions or experience life limitations to the degree we have seen in this report. Asthma can be properly managed if respiratory function is monitored, controller and rescue medications are appropriately administered, triggers are minimized, and there is education for patient self-management.

Uncontrolled asthma puts children and adults at dangerous risk, and places an added burden on their families, their schools, their workplaces, and on the health care delivery system. It is incumbent upon us to understand why this chronic respiratory disease has become so prevalent in our society, and in particular, why New Englanders are so profoundly affected. If we are to effectively tackle the disease, then we must commit ourselves to policy changes that will reduce the incidence and prevalence of asthma, and to direct efforts to preventive public and environmental health measures. The following represent recommendations by the Asthma Regional Council of New England:

SPECIFIC RECOMMENDATIONS- Detailed Recommendations are in the full report.

1. **Increase research to understand more about what causes asthma, why it is still such a common and growing disease, and why it affects certain populations more than others.**
2. **Expand governmental support to enhance environmental research and health programs that seek to understand and reduce the environmental contributors to asthma.**
3. **Improve states' abilities to conduct asthma surveillance in order to better understand prevalence trends, geographic and socio-economic distributions, health care utilization and costs, and whether interventions are working.**
4. **Increase our understanding of the role that certain occupations play in contributing to the asthma epidemic.**
5. **Improve access to clinical asthma management and social service programs for people suffering with asthma, with specific focus on groups with the heaviest burden.**
6. **Adopt policies, health coverage, and financial incentives that support quality primary care, home visits and medical supplies to prevent asthma severity.**
7. **Increase programs to reduce smoking and exposure to environmental tobacco smoke.**
8. **Promote standards and provide financial incentives for building and maintaining healthy homes and school facilities.**
9. **Consider how community health is affected when developing transportation, commercial development and housing policies.**
10. **Launch coordinated information, education and communications strategies and advocacy to promote shared objectives in the region.**

Finally, the realities of racial, ethnic and socio-economic disparities must be grappled with if we are to improve asthma outcomes in any meaningful fashion. This paradigm is true for most other diseases as well. As long as we continue to focus our resources almost exclusively on finding increasingly expensive medical treatments, but fail to address the structural determinants for why many chronic diseases have become so pervasive, we will fail as a society to protect the health and welfare of all of our citizens, and we will continue our upward spiral toward a system of healthcare that is unaffordable for all of us. While investing in research, prevention and primary care is the key to unlocking the mystery and burden of asthma, we will not make true progress until we address the unspoken issues of poverty and race in this country as well.